

ABSTRACT OF THE DISCLOSURE

For a semiconductor device S as a sample of an observed object, there are provided an image acquisition part 1 for carrying out observation of the semiconductor device S, and an optical system 2 comprising an objective lens 20. A solid immersion lens (SIL) 3 for magnifying an image of the semiconductor device S is arranged movable between an insertion position where the solid immersion lens includes an optical axis from the semiconductor device S to the objective lens 20 and is in close contact with a surface of the semiconductor device S, and a standby position off the optical axis. Then an image containing reflected light from SIL 3 is acquired with the SIL 3 at the insertion position, and the insertion position of SIL 3 is adjusted by SIL driver 30, with reference to the image. This realizes a semiconductor inspection apparatus (microscope) capable of readily performing observation of the sample necessary for an analysis of microstructure of a semiconductor device or the like, and a semiconductor inspection method (sample observation method) therewith.